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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/170,724	10/14/1998	TAKASHI NAKATSUYAMA	7217/57094	7105

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EXAMINER

GAUTHIER, GERALD

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 04/07/2004

20

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/170,724

Applicant(s)

NAKATSUYAMA, TAKASHI

Examiner

Gerald Gauthier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 3, 6, 8 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebisawa (US 6,144,400) in view of Min (US 5,222,143).

Regarding **claim 1**, Ebisawa discloses a data delivery system, data receiving apparatus and storage medium for video programs (column 1, lines 8-12), (which reads on claimed "a data distribution system including an information service center (10 on FIG. 1) and terminal equipment (20 on FIG. 1) remote from the information service center and adapted for distributing a program selected at the terminal equipment from the information service center to the terminal equipment"), the information service center comprising:

storage means (column 4, line 15 "the video data storage device") for storing a plurality of programs (column 4, lines 9-28) [The video data storage device stores the video programs];

retrieving means (12 on FIG. 1) for retrieving a desired program (column 4, line 49 "video data") selected at the terminal equipment from the plurality of programs stored

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in the storage means (column 4, lines 43-47) [The selecting unit selects one stream video data and outputs the same to the communication unit];

dividing means (14 on FIG. 1) for dividing the desired program retrieved by the retrieving means into an outline part (column 4, line 49 "control signal") for informing a user (column 5, line 34 "the viewer") of an outline of the desired program and into a supplement part (column 4, line 49 "the data") recombinaible with the outline part for restoring the desired program wherein the outline part is of a lower quality than the desired program (column 4, lines 48-58) [The control unit carries out communication of the data and the signal of the desired program]; and

transmission means (11 on FIG. 1) for transmitting the outline part first followed by the supplement part to the terminal equipment (column 4, lines 29-35) [The data transmitting unit transmitted parts of the desired program].

Ebisawa discloses the dividing means and the transmission means but fails to disclose the receiving means, the recombining means and the reproducing means of the terminal equipment and the lower quality outline part.

However, Min teaches a terminal equipment comprising:

receiving means for receiving the outline part first followed by the supplement part of the desired program transmitted from the information service center (column 2, lines 31-37) [The compatible multivoice broadcasting receiver having a band pass filter L+R signal detector and L-R signal detector as a lower quality outline part];

a storage device (70 on FIG. 1);

recombining means for recombining the outline part and the supplement part to restore the desired program while the supplement part is being received by the receiving means and for storing the restored program in the storage device while the supplement part is being received (column 2, lines 54-68) [The buffer section matches the shifted phase of the signals outputted from the signals detector]; and

reproducing means for reproducing the lower quality outline part while the outline part is being received and for continuing the reproduction of the lower quality outline part while the supplement part is being received until the reproduction of the lower quality outline part is completed, thereby monitoring the desired program while the recombining means restores the desired program (column 5, lines 9-24) [The American broadcast system outputted the main channel signal L+R that is the sum signal of the left channel and L-R is the lower quality outline part].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the terminal equipment of Ebisawa by adding the receiving means, the recombining means and the reproducing means as taught by Min.

The modification will allow the system to reproduce the audio data into a plurality of bands having different respective frequency components such that the system would provide a compatible multivoice broadcasting receiving apparatus for receiving both the Korean and American signals.

Regarding **claim 3**, Ebisawa discloses the dividing means generates a first output through addition of a plurality of channels for the audio data and a second output

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through subtraction of the plurality of channels, for providing one of the first output and the second output as the outline part and a remaining output as the supplement part (column 7, lines 28-41).

Regarding **claim 6**, Ebisawa discloses when the supplement part from the information service center begins downloading into the terminal equipment, the outline part is continuously reproduced for monitoring by the user (column 7, lines 6-19).

Regarding **claim 8**, Ebisawa discloses wherein the information service center transmits to the terminal equipment the supplement part including additional lock data for a predetermined billing and receives from the terminal equipment key data corresponding to the additional lock data, thereby permitting reproduction of the supplement part at the terminal equipment (column 7, lines 28-41).

Regarding **claim 24**, Ebisawa discloses a data delivery system, data receiving apparatus and storage medium for video programs (column 1, lines 8-12), (which reads on claimed "a method of distributing a program between an information service center and a terminal equipment remote from the information service center"), comprising the steps of:

dividing a desired program (column 4, line 49 "the data") selected at the terminal equipment into an outline part (column 4, line 49 "the control signal") for informing a user (column 5, line 34 "the viewer") of an outline of the desired program and into a

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supplement part (column 4, line 49 "the data") recombina-ble with the outline part for restoring the desired program, wherein the outline part is of a lower quality than the desired program (column 4, lines 48-58) [The control unit carries out communication of the data and the signal of the desired program];

transmitting the outline part first followed by the supplement part to the equipment (column 4, lines 29-35) [The data transmitting unit transmitted parts of the desired program].

Ebisawa discloses the dividing program and the transmitting of the outline program but fails to disclose the receiving means, the recombining means and the reproducing means and the lower quality outline part.

However, Min teaches receiving at the terminal equipment the outline part first followed by the supplement part of the desired program distributed from the information service center (column 2, lines 31-37) [The compatible multivoice broadcasting receiver having a band pass filter L+R signal detector and L-R signal detector which is the lower quality outline part];

recombining the outline part and the supplement part to restore the desired program while the supplement part is being received (column 2, lines 54-68) [The buffer section matches the shifted phase of the signals outputted from the signals detector];

storing the restored program while the supplement part is being received (column 2, lines 39-53) [The buffer driving section incorporates a comparing section that detect the signals and stores the signals]; and

reproducing the lower quality outline part while the lower quality outline part is being received and for continuing the reproduction of the lower quality outline part while the supplement part is being received until the reproduction of the a lower quality outline part is completed, thereby monitoring the desired program while the desired program is being restored (column 5, lines 9-24) [The American broadcast system outputted the main channel signal L+R that is the sum signal of the left channel and L-R the lower quality outline part].

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the terminal equipment of Ebisawa by adding the receiving means, the recombining means and the reproducing means as taught by Min.

The modification will allow the system to reproduce the audio data into a plurality of bands having different respective frequency components such that the system would provide a compatible multivoice broadcasting receiving apparatus for receiving both the Korean and American signals.

3. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ebisawa in view of Min and in further view of Kitabatake (US 5,469,474).

Regarding **claim 2**, Ebisawa as applied to **claim 1** above differs from **claim 2** in that it fails to disclose the dividing and encoding means of the audio data into a plurality of bands having different respective frequency components.

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However, Kitabatake teaches wherein the desired program includes audio data and the dividing means comprises:

an audio data dividing means for dividing the audio data into a plurality of bands having different respective frequency components (11 on FIG. 2); and

encoding means for encoding a frequency component of each of the bands resulting from a division of the audio data by the audio data dividing means by allocating a quantization bit to each one of the frequency components for masking a quantum noise, for providing as the outline part an output corresponding to a first band of the plurality of bands, and for providing as the supplement part an output corresponding to a second band of the plurality of bands (column 5, line 67 to column 6, line 8).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Ebisawa by adding the dividing and encoding means of the audio data into a plurality of bands having different respective frequency components as taught by Kitabatake.

The modification will allow the system to divide the audio data into a plurality of bands having different respective frequency components such that the frequency band signals would be quantized.

4. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ebisawa in view of Min and in further view of Tsutsui et al. (US 5,731,767).

Regarding **claim 4**, Ebisawa as applied to **claim 1** above differs from **claim 4** in that it fails to disclose the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum.

However, Tsutsui teaches the dividing means comprises frequency band dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum for providing one of the even spectrum and the odd spectrum as the outline part and a remaining spectrum as the supplement part (column 14, line 64 to column 15, line 7).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Ebisawa by adding the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum as taught by Tsutsui.

The modification will allow the system to have the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum such that the respective bands would become in correspondence with the critical bandwidths.

5. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ebisawa in view of Min and in further view of Tsuga et al. (US 5,895,124).

Regarding **claim 5**, Ebisawa as applied to **claim 1** above differs from **claim 5** in that it fails to disclose dividing the audio data into vocal data and accompaniment data.

However, Tsuga teaches the dividing means divides the audio data into vocal data and accompaniment data for providing one of the vocal data and the accompaniment data as the outline part and remaining data as the supplement part (column 1, line 64 to column 2, line 6).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Ebisawa by adding dividing the audio data into vocal data and accompaniment data as taught by Tsuga.

The modification will allow the system to divide the audio data into vocal data and accompaniment data such that the user would be able to select a duet.

6. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ebisawa in view of Min and in further view of Schoen et al. (US 5,592,511).

Regarding **claim 7**, Ebisawa as applied to **claim 1** above differs from **claim 7** in that it fails to disclose reproduction of the outline part at the terminal equipment for monitoring not counted for billing.

However, Schoen teaches wherein reproduction of the outline part at the terminal equipment for monitoring is not counted for billing (column 3, lines 21-30).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Ebisawa by adding reproduction of the outline part at the terminal equipment for monitoring not counted for billing as taught by Schoen.

The modification will allow the system to have reproduction of the outline part at the terminal equipment for monitoring not counted for billing such that the user would retrieve the data.

Response to Arguments

7. Applicant's arguments with respect to **claims 1-8 and 24** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Gauthier whose telephone number is (703) 305-0981. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheryl J. Fawcett
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PRIMARY EXAMINER *for*
Fan Tsang

April 5, 2004